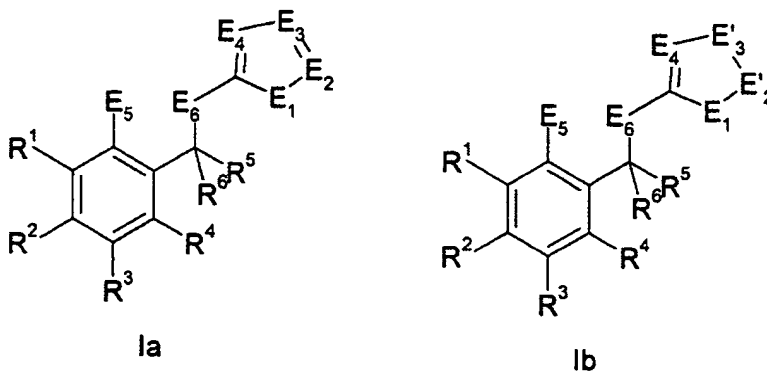


## AMENDMENTS TO THE CLAIMS

1. (currently amended) A compound of the formula Ia or Ib:



where,

in the formula Ia,

$\underline{E1E1}$  is O, S, Se, Te, NR, CR<sub>2</sub>, ~~PR~~, or PR;

$\underline{E2E2}$ ,  $\underline{E3E3}$  are each CR, N, ~~P~~, or P;

$\underline{E4E4}$  is N, ~~P~~, or P;

$\underline{E5E5}$  is OH, SH, NHR, ~~or~~ OR', SR', ~~NRR'~~, or NRR';

$\underline{E6E6}$  is NH, PH, ~~or~~ NR', ~~PR'~~, or PR';

R<sup>5</sup>, R<sup>6</sup> are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical[[],];

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group[[],];

R is hydrogen, a linear, branched or cyclic alkyl radical[[],];

R' is a linear, branched or cyclic alkyl radical[[],];

where at least one of the groups  $\underline{E5E5}$  and  $\underline{E6E6}$  contains a hydrogen atom; and

in the formula Ib,

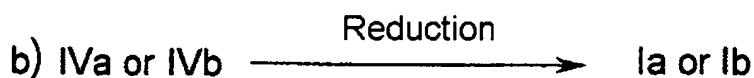
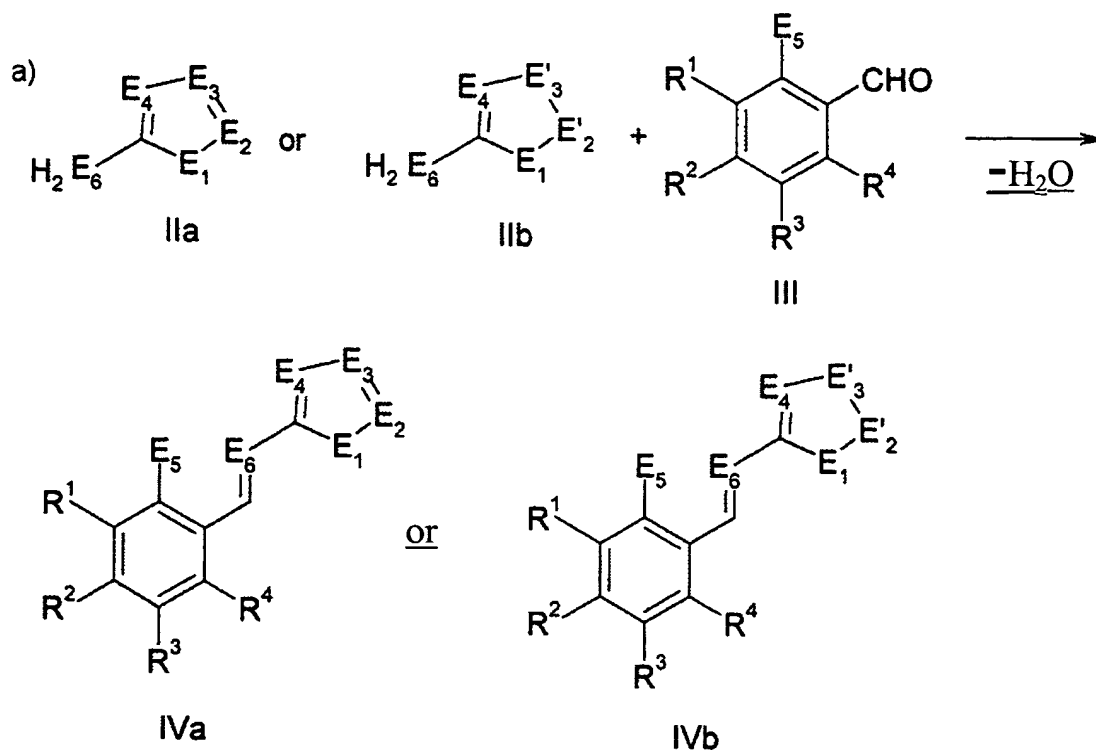
the symbols  $\underline{E1E1}$ ,  $\underline{E4E4}$ ,  $\underline{E5E5}$ ,  $\underline{E6E6}$ , R<sup>5</sup>, R<sup>6</sup>, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R and R' are as defined in formula Ia;

and

$\text{E}_2\text{E}'_2$  and  $\text{E}_3\text{E}'_3$

are each O, S, Se, Te, NR, CR<sub>2</sub>, or PR.

2. (currently amended) A compound as claimed in claim 1, wherein  $\text{E}_1\text{E}'_1$  is S.
3. (currently amended) A compound as claimed in claim 1, wherein  $\text{E}_4\text{E}'_4$  is N.
4. (currently amended) A compound as claimed in claim 1, wherein  $\text{E}_6\text{E}'_6$  is NH.
5. (currently amended) A process for preparing a compound as claimed in claim 1, which comprises reacting a compound of the formula IIa or IIb with a compound of the formula III to form a compound of the formula IVa or IVb (step a)) and subsequently reducing the compound of the formula IVa or IVb to give a compound of the formula Ia or Ib (step b)):



where

$E_1E_1$  is O, S, Se, Te, NR, CR<sub>2</sub>, PR, or PR;

$E_2E_2$ ,  $E_3E_3$  are each CR, N, P, or P;

$E_2'E_2$ ,  $E_3'E_3$  are each O, S, Se, Te, NR, CR<sub>2</sub>, PR, or PR;

$E_4E_4$  is N, P, or P;

$E_5E_5$  is OH, SH, NHR, OR', SR', or NRR'[[,]];

$E_6E_6$  is NH, PH, NR', or PR'[[,]];

$R^5$ ,  $R^6$  are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical[[,]];

$R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group[[,]];

R is hydrogen, a linear, branched or cyclic alkyl radical[[,]]; and

R' is a linear, branched or cyclic alkyl radical[[,]];

where at least one of the groups  $E_5E_5$  and  $E_6E_6$  contains a hydrogen atom.

6. (previously presented) A metal complex comprising a compound as claimed in claim 1.

7. (currently amended) A metal complex of the formula V



where

L is a monoanionic or dianionic ligand derived from a compound of the formula Ia or Ib as claimed in claim 1

where,

- in the case of a dianionic ligand,

$E_5E_5$  is O<sup>-</sup>, S<sup>-</sup>, RN<sup>-</sup>, or RN<sup>-</sup>; and

$E_6E_6$  is N<sup>-</sup>, P<sup>-</sup>, or P<sup>-</sup>,

and, in the case of a monoanionic ligand,

either

$E_5E_5$  is O<sup>-</sup>, S<sup>-</sup>, RN<sup>-</sup>, or RN<sup>-</sup> and

$E_6E_6$  is NR, PR, or PR,

or

$E_5E_5$  is OR, SR, NRR', or NRR' and

$E_6E_6$  is N, P, or P;

and  $E_1$  is O, S, Se, Te, NR, CR<sub>2</sub>, or PR;

$E_2, E_3$  are each CR, N, or P;

$E'_2, E'_3$  are each O, S, Se, Te, NR, CR<sub>2</sub>, or PR;

$E_4$  is N, or P;

$R^1, R^2, R^3, R^4$  are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group;

$R^5, R^6$  are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical;

R is hydrogen, a linear, branched or cyclic alkyl radical; and

$R'$  is a linear, branched or cyclic alkyl radical;

~~the further symbols  $E_1, E_2, E'_2, E_3, E'_3, E_4, R^5, R^6, R^1, R^2, R^3, R^4, R$  and  $R'$  in the formulae I and II have the same meanings as forth for the corresponding symbols in claim 1;~~

and, when L is a dianionic ligand,

M is Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, ~~W~~, or W;

$R''$  is hydrogen, a hydrocarbon radical, NR<sup>'''</sup><sub>2</sub>, OR<sup>'''</sup>, halogen, acetylacetonate, where  $R'''$  is hydrogen or a linear, branched or cyclic alkyl radical[ $[\cdot]$ ];

Y is a Lewis ~~acid~~, base;

x is 1 or 2[ $[\cdot]$ ];

y is from 1 to 4[ $[\cdot]$ ]; and

z is from 0 to 2,

where  $R''$  and Y may be joined to form a joint radical and  $2x + y$  corresponds to the valence of M;

or, when L is a monoanionic ligand,

M is Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Ni, Pd, Co, Fe, Cu, Ru, ~~Rh~~, or Rh;

$R''$  is hydrogen, a hydrocarbon radical, NR<sup>'''</sup><sub>2</sub>, OR<sup>'''</sup>, halogen, or acetylacetonate, where  $R'''$  is hydrogen or a linear, branched or cyclic alkyl radical[ $[\cdot]$ ];

Y is a Lewis ~~acid~~, base;

x is 1, 2 or 3[ $[\cdot]$ ];

y is from 1 to 4[ $[\cdot]$ ]; and

- z is from 0 to 2[[,]]; where R" and Y may be joined to form a joint radical and x + y corresponds to the valence of M.
8. (original) A metal complex as claimed in claim 7, wherein the ligand L is a dianionic ligand and M is Ti, Zr or Hf.
  9. (original) A metal complex as claimed in claim 8, wherein x is 1, y is 2 and z is 0.
  10. (original) A metal complex as claimed in claim 7, wherein the ligand L is a monoanionic ligand and M is Ti, Zr, Hf, Ni or Pd.
  11. (currently amended) A metal complex as claimed in claim 10, wherein when M is Ti, Zr, or Hf, x is 2, y is 2 and z is 0 or x is 1, y is 3 and z is 0 and when M is Ni or Pd, x is 1, y is 1 and z is 0.
  12. (previously presented) A process for preparing a metal complex as claimed in claim 7 by deprotonation of a compound of formula Ia or Ib by means of a base and subsequent reaction with a metal compound, or  
by direct reaction of a compound of formula Ia or Ib with a metal compound,  
where the metal compound comprises a metal M selected from the group consisting of Ti, Zr, Hf, V, Nb, Ta, Cr, Mo and W, when L is a dianionic ligand, or a metal M selected from the group consisting of Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Ni, Pd, Co, Fe, Cu, Ru and Rh, when L is a monoanionic ligand.
  13. (currently amended) A catalytically active composition comprising:
    - a) a metal complex of the formula V as claimed in claim 7 as component A[[,]]; and
    - b) at least one compound, as component B, selected from the group consisting of
      - (b1)an organometallic compound, as component B1,
      - (b2)an organoaluminum oxy compound, as component B2, and
      - (b3) a compound which reacts with the metal complex to form an ion pair, as component B3.
  14. (original) A catalytically active composition as claimed in claim 13 which further comprises a support material (component C) in addition to the components A and B.
  15. (previously presented) A process for preparing a catalytically active composition as claimed in claim 13 which comprises bringing a metal complex of the formula V

(component A) into contact with a compound (component B) selected from the group consisting of

- (b1) an organometallic compound, as component B1,
- (b2) an organoaluminum oxy compound, as component B2, and
- (b3) a compound which reacts with the metal complex to form an ion pair, as component B3,

and optionally a support material (component C).

- 16. (cancelled)
- 17. (previously presented) A process for the polymerization or copolymerization of olefins, which comprises polymerizing an olefin in the presence of a catalytically active composition as claimed in claim 13 or copolymerizing at least two different olefins in the presence of a catalytically active composition as claimed in claim 13.
- 18. (canceled).